

AN 129:205854 HCA
TI High-strength **Al alloy** wires and coils showing high
thermal and electric conductivity and their preparation
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PA Sumitomo Electric Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.

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AB	The Al alloys contain Si 0.2-13, Fe 0.2-1.0, Cu 0.2-6.0, Mn <1.2, and Mg <4.5 wt.% and have HVM hardness 140-200 and crystal grain aspect ratio .gtoreq.10. The Al alloys may further contain additives selected from Co <1.5, Cr <0.5, Ti <0.2, Zn 0.1-7.7, Zr 0.05-0.25, and V <0.10 wt.%. The alloys may have surficial residual compressive stress 10-200 N/mm2. High-strength Al alloy wires are prepd. from Al alloy powders of the compns. by heating, solidifying, and then wire drawing, whereas soln. treatment may be carried out before or alternately with the wire drawing. The Al alloy wires are coiled and heat treated to give coils.				